

IN THE CLAIMS

1. (Currently Amended) A method comprising:

receiving a search term for a query;

searching a network of concept terms for terms related to the search term, wherein the network of concept terms is associated with a subject matter domain having a plurality of predetermined relevant terms, wherein each related term and the search term appear together in at least one sentence in a web page residing on websites located on servers connected to, and wherein the web page includes at least one of the relevant terms;

reformulating the query using the search term and the related terms before performing a search for documents based on the search term;

searching a local database for data terms that match the search term and the related terms, wherein the data terms are generated based on occurrence frequencies within a document residing on the websites located on servers connected to;

and

in response to matching data terms with the search terms and related terms corresponding to the data terms, retrieving the documents from the respective websites.

2. (Previously Presented) The method of claim 1, further comprising displaying the retrieved documents, the search terms and the related terms, wherein at least one of the related terms includes a link, when activated, a further search of concept terms is conducted and one

or more further related terms are presented, and wherein searching the local database and retrieving the documents are iteratively performed based on the further related terms.

3. (Original) The method of claim 1, further comprising generating a summary of the documents for the searched terms that match the search term and the related terms.

4. (Original) The method of claim 3, wherein the summary includes the searched terms and a beginning portion of the documents.

5. (Original) The method of claim 1, wherein the network is the Internet.

6. (Original) The method of claim 1, wherein the network of concept terms includes links between related terms, wherein the links are based on semantic relationships.

7. (Original) The method of claim 1, wherein the semantic relationships are selected from a group consisting of canonical, synonym, hyponym, hypernym, part, product and member.

8. (Original) The method of claim 1, wherein related terms are more specific than the search term.

9. (Previously Presented) The method of claim 1, wherein the occurrence frequencies include mutuality between words within the documents.

10. (Currently Amended) A method comprising:

recursively performing the following process until desired documents are found:
receiving a search term for a query;
searching a network of concept terms for terms related to the initial search term,
wherein the network of concept terms is associated with a subject matter
domain having a plurality of predetermined relevant terms wherein each related
term and the search term appear together in at least one sentence in a web page
residing on websites located on servers connected to, and wherein the web
page includes at least one of the relevant terms;
reformulating the query using the initial search term and the related terms before
performing a search for documents based on the search term;
searching a local database for data terms that match the initial search term and the
related terms, wherein the data terms are generated based on occurrence
frequencies within a document residing on the websites connected to;
displaying results of the searching of the local database; and
displaying the search term and the related terms.

11. (Original) The method of claim 10, wherein receiving the search term for the query includes receiving the search term for the query based on the displaying of the search term and the related items in a prior process.

12. (Original) The method of claim 10, wherein the new search term is a related term from a prior search of the network of concept terms.

13. (Original) The method of claim 10, wherein reformulating the new query includes combining the new search term and the new related terms together using search operators.

14. (Previously Presented) The method of claim 13, wherein the search operators are selected from the group consisting of AND, OR, NOT and NEAR, wherein the NEAR operator is satisfied when the new search term and at least one of the new related terms occur within a predetermined number of words within a sentence of a document.

15. (Currently Amended) A method comprising:

- receiving an initial search term for a query;
- searching a network of concept terms for terms related to the initial search term,
wherein the network of concept terms is associated with a subject matter domain having a plurality of predetermined relevant terms, wherein each related term and the search term appear together in at least one sentence in a web page residing on websites located on servers connected to, and wherein the web page includes at least one of the relevant terms;
- reformulating the query using the initial search term and the related terms before performing a search for documents based on the search term;
- searching a local database for data terms that match the initial search term and the related terms, wherein the data terms are generated based on occurrence frequencies within a document;
- displaying results of the searching of the local database;
- displaying the search term and the related terms;
- recursively performing the following until desired documents are found:

receiving a new search term for a new query based on the display of the results,
the search term and the related terms;
searching the network of concept terms for new terms related to the new search
term;
reformulating the new query using the new search term and the new related
terms;
searching the local database for data terms that match the new search term and
the new related terms, wherein the data terms are from documents
residing on the websites ~~residing on servers across the network~~;
displaying results of the searching of the local database; and
displaying the new search term and the new related terms.

16. (Original) The method of claim 15, wherein the new search term is a related term from a prior search of the network of concept terms.

17. (Original) The method of claim 15, wherein reformulating the new query includes combining the new search term and the new related terms together using search operators.

18. (Previously Presented) The method of claim 17, wherein the search operators are selected from the group consisting of AND, OR, NOT and NEAR, wherein the NEAR operator is satisfied when the new search term and at least one of the new related terms occur within a predetermined number of words within a sentence of a document.

19. (Currently Amended) An apparatus comprising:

a database that includes data terms, wherein the data terms are generated from documents residing on websites located on servers across a network;
a concept network that includes search terms and related terms that are linked together based on semantic relationships, the search terms and the related terms to locate portions of the documents based on a match between the searchable terms and the related terms and the data terms stored in the database, wherein the concept network is associated with a subject matter domain having a plurality of predetermined relevant terms, wherein each pair of linked search term and related term appear together in at least one sentence in a web page residing on websites located on servers connected to, and wherein the web page includes at least one of the relevant terms.

20. (Original) The apparatus of claim 19, wherein the semantic relationships are selected from a group consisting of canonical, synonym, hyponym, hypernym, part, product and member.

21. (Original) The apparatus of claim 19, wherein the related terms are more specific than the search terms.

22. (Currently Amended) A machine-readable medium that provides instructions, which when executed by a machine, cause said machine to perform operations comprising:
receiving a search term for a query;
searching a network of concept terms for terms related to the search term, wherein the network of concept terms is associated with a subject matter domain having a

plurality of predetermined relevant terms, wherein each related term and the search term appear together in at least one sentence in a web page residing on websites located on servers connected to, and wherein the web page includes at least one of the relevant terms;

reformulating the query using the search term and the related terms before performing

a search for documents based on the search term;

searching a local database for data terms that match the search term and the related

terms, wherein the data terms are generated based on occurrence frequencies

within a document residing on the websites connected to; and

in response to matching data terms with the search terms and related terms

corresponding to the data terms, retrieving the documents from the respective websites.

23. (Original) The machine-readable medium of claim 22, further comprising displaying the retrieved documents, the search terms and the related terms.

24. (Original) The machine-readable medium of claim 22, further comprising generating a summary of the documents for the searched terms that match the search term and the related terms.

25. (Original) The machine-readable medium of claim 22, wherein the network of concept terms includes links between related terms, wherein the links are based on semantic relationships.

26. (Original) The machine-readable medium of claim 22, wherein the semantic relationships are selected from a group consisting of canonical, synonym, hyponym, hypernym, part, product and member.

27. (Currently Amended) A machine-readable medium that provides instructions, which when executed by a machine, causes said machine to perform operations comprising:

recursively performing the following process until desired documents are found:

receiving a search term for a query;

searching a network of concept terms for terms related to the initial search

term, wherein the network of concept terms is associated with a subject matter domain having a plurality of predetermined relevant terms

wherein each related term and the search term appear together in at

least one sentence in a web page residing on websites located on servers

connected to, and wherein the web page includes at least one of the relevant terms;

reformulating the query using the initial search term and the related terms

without performing a search for documents based on the search term;

searching a local database for data terms that match the initial search term and

the related terms, wherein the data terms are generated based on

occurrence frequencies within a documents residing on the websites

connected to;

displaying results of the searching of the local database; and

displaying the search term and the related terms.

28. (Original) The machine-readable medium of claim 27, wherein receiving the search term for the query includes receiving the search term for the query based on the displaying of the search term and the related items in a prior process.

29. (Original) The machine-readable medium of claim 27, wherein the new search term is a related term from a prior search of the network of concept terms.

30. (Original) The machine-readable medium of claim 27, wherein reformulating the new query includes combining the new search term and the new related terms together using search operators.

31. (Previously Presented) The method of claim 1, wherein the related terms are different than the search term and have similar meaning of the search term.

32. (Previously Presented) The method of claim 1, wherein the search term includes a name of an organization, and wherein the related terms include at least one of a name of subsidiaries of the organization, a product name of the organization, and a stock symbol of the organization.

33. (Previously Presented) The method of claim 1, wherein the occurrence frequencies include mutual information associated with a first term and a second term within a given web page using a predetermined algorithm.

34. (Previously Presented) The method of claim 33, wherein the mutual information is determined based on one or more weight factors of the first and second terms, the one or more weight factors representing occurrence frequencies of the respective term.

35. (Currently Amended) A method comprising:

receiving a search term for a query;

searching a network of concept terms for terms related to the search term, wherein

each related term and the search term appear together in at least one sentence in a web page;

reformulating the query using the search term and the related terms before performing a search for documents based on the search term;

searching a local database for data terms that match the search term and the related

terms, wherein the data terms are generated based on occurrence frequencies within a document residing on web sites located on server connected to,

wherein the occurrence frequencies include mutual information associated with a first term and a second term within a given web page using a predetermined

algorithm, wherein the mutual information is determined based on one or more weight factors of the first and second terms, the one or more weight factors representing occurrence frequencies of the respective term~~The method of claim~~

34, and wherein the mutual information (MI) of the first term x and the second term y is determined by $MI(x, y) = f(x, y) / f(x) + f(y) - f(x, y)$, wherein f(x, y) corresponds to an occurrence frequency of both the first term and the second term, wherein f(x) corresponds to an occurrence frequency of the first term, and wherein f(y) corresponds to an occurrence frequency of the second term;

and

in response to matching data terms with the search terms and related terms

corresponding to the data terms, retrieving the documents from the respective websites.

36. (New) A machine-readable storage medium having instructions, when executed by a machine, causes the machine to perform a method, the method comprising:

receiving a search term for a query;

searching a network of concept terms for terms related to the search term, wherein

each related term and the search term appear together in at least one sentence in a web page;

reformulating the query using the search term and the related terms before performing a search for documents based on the search term;

searching a local database for data terms that match the search term and the related

terms, wherein the data terms are generated based on occurrence frequencies within a document residing on web sites located on server connected to,

wherein the occurrence frequencies include mutual information associated with a first term and a second term within a given web page using a predetermined algorithm, wherein the mutual information is determined based on one or more

weight factors of the first and second terms, the one or more weight factors representing occurrence frequencies of the respective term, and wherein the

mutual information (MI) of the first term x and the second term y is

determined by $MI(x, y) = f(x, y) / f(x) + f(y) - f(x, y)$, wherein $f(x, y)$

corresponds to an occurrence frequency of both the first term and the second

term, wherein $f(x)$ corresponds to an occurrence frequency of the first term,
and wherein $f(y)$ corresponds to an occurrence frequency of the second term;

and

in response to matching data terms with the search terms and related terms

corresponding to the data terms, retrieving the documents from the respective
websites.